

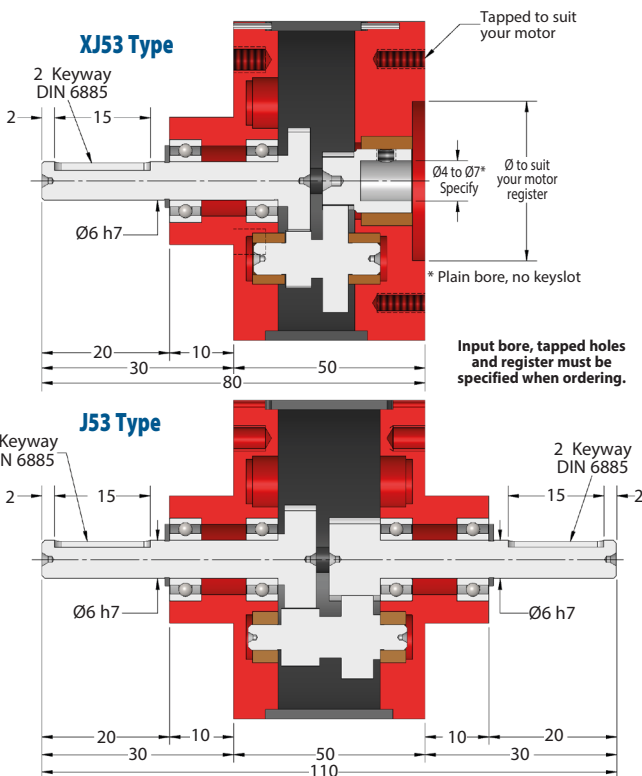
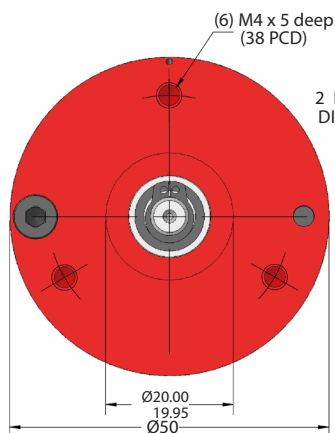
# GEARBOXES

## Inline Spur Gear Reducers

6mm Double or Single Shaft, 0.43 – 1.15 Nm **1:1 - 625:1**

**e-cad**  
Drawings  
Available

**J53  
XJ53**



| Part Number      | Ratio       | Efficiency at 1000 Rpm                                 | Nm Output at 1000 Rpm | Standard Direction |
|------------------|-------------|--------------------------------------------------------|-----------------------|--------------------|
| J53-140 XJ53-140 | 140:1       | 85%                                                    | 0.56                  | Same               |
| J53-160 XJ53-160 | 160:1       | 85%                                                    | 0.57                  | Same               |
| J53-200 XJ53-200 | 200:1       | 85%                                                    | 0.58                  | Same               |
| J53-300 XJ53-300 | 300:1       | 85%                                                    | 0.63                  | Same               |
| J53-400 XJ53-400 | 400:1       | 85%                                                    | 0.65                  | Same               |
| J53-500 XJ53-500 | 500:1       | 85%                                                    | 0.67                  | Same               |
| J53-625 XJ53-625 | 625:1       | 85%                                                    | 0.69                  | Same               |
| J53-SP XJ53-SP   | 1:1 - 625:1 | Special Ratios : Replace <b>SP</b> with required ratio |                       |                    |

**J53 Weight:** 0.17 kg.

**Backlash:** Depends on ratio.

**Max. Input Speed:** 4,000 Rpm.

**Greased for Life:** Shell Gadus S5 V42P 2.5.

**Max. Overhung and Thrust Loads at 1000 Rpm:**

Output Overhung Load ( $F_{a0}$ ) = 5 kg. Output Thrust Load ( $F_a$ ) = 5 kg.

**Shaft Keys:** KK2-14.

Testing in your application is necessary.

You will need to assess duty cycles and confirm gearbox suitability with your own calculations.

All figures listed are to be used for guidance only.

### Output Torque Nm

| Rpm Input | Reduction Ratio |       |       |       |       |       |       |
|-----------|-----------------|-------|-------|-------|-------|-------|-------|
|           | 140:1           | 160:1 | 200:1 | 300:1 | 400:1 | 500:1 | 625:1 |
| 4000      | 0.43            | 0.45  | 0.46  | 0.51  | 0.53  | 0.55  | 0.58  |
| 2000      | 0.50            | 0.52  | 0.53  | 0.58  | 0.59  | 0.61  | 0.63  |
| 1000      | 0.56            | 0.57  | 0.58  | 0.63  | 0.65  | 0.67  | 0.69  |
| 500       | 0.63            | 0.67  | 0.69  | 0.69  | 0.79  | 0.84  | 0.96  |
| 200       | 0.76            | 0.79  | 0.79  | 0.79  | 0.91  | 0.99  | 0.15  |
| 100       | 0.86            | 0.91  | 0.91  | 0.91  | 1.15  | 1.15  | 1.15  |
| 50        | 0.95            | 0.95  | 0.95  | 0.95  | 1.15  | 1.15  | 1.15  |
| 10        | 1.15            | 1.15  | 1.15  | 1.15  | 1.15  | 1.15  | 1.15  |